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D32926

June 19, 2014

Mr. Craig Wright, Director
Air Resources Division
NH Dept. of Environmental Services
29 Hazen Drive, PO Box 95
Concord, NH 03302-0095

Public Service Company of New Hampshire Schiller Station Facility ID #330100012
Installation of Dry Sorbent and Activated Carbon Injection Emissions Control Technologies
Supplemental Information – Permitting Action Plan

Dear Mr. Wright:

As you know, Public Service Company of New Hampshire (PSNH) submitted an application (#14-0081) for a Temporary Permit for the installation and operation of new dry sorbent injection (DSI) and activated carbon injection (ACI) emission control technologies at Schiller Station. The installation of the DSI/ACI systems will be used in combination with existing control technologies to meet the requirements of the *Mercury and Air Toxics Standard – MATS*. The DSI/ACI installation is a multi-year, multi-component project with start-up and commissioning of the new systems expected to occur by the end of 2015. Throughout the planning of the DSI/ACI Project, PSNH recognized the need for a synergistic approach to the selection of control technologies to comply with the MATS requirements and to ensure that there continues to be no exceedances of the 1- hour sulfur dioxide (SO_2) NAAQS. These technologies were selected based on their ability to effectively remove mercury and hydrochloric acid emissions with a co-benefit of removing sulfur dioxide emissions from the flue gas. The following is the permitting action plan outlining PSNH's path forward to address both the requirements of MATS and SO_2 NAAQS.

Selection of Technologies

PSNH will install dry sorbent and activated carbon injection systems to control emissions of mercury, hydrochloric acid and sulfur dioxide. The project involves the construction and installation of a carbon bulk bag unloading system, dry sorbent silo, sorbent feed equipment and injection lances located in the duct work of Unit 4 and Unit 6 to supply sorbent and activated carbon directly into the flue gas stream. An application for a temporary permit was submitted on February 27, 2014 and deemed complete by NHDES on May 30, 2014.

Exploratory Air Dispersion Modeling for SO_2

PSNH understands NHDES' interest in determining what impact the DSI/ACI control systems will have on reducing sulfur dioxide emissions from Units 4 and 6 and that the information will aid the Department as it prepares to implement the 2010 1- hour sulfur dioxide NAAQS. To assist DES, PSNH plans to conduct exploratory air dispersion modeling and will provide the results of the modeling to DES for informational purposes.

A Draft Air Dispersion Modeling Protocol will be developed and submitted to NHDES for approval in July. PSNH will then conduct the exploratory modeling according to the approved draft protocol and provide the modeling results to DES in September 2014. As noted above, the exploratory modeling results will be provided to DES for informational purposes only. PSNH expects to complete a final

round of air dispersion modeling after the DSI/ACI systems have been commissioned, optimized and the emissions verified.

MATS Compliance Plan

PSNH will prepare a Mercury and Air Toxics Rule (MATS) Compliance Plan and submit the plan to NHDES in September 2014 as part of the DSI Temporary Permit Application. The Plan will consist of a description of the methods used to determine initial and continued compliance with respect to all applicable MATS requirements. Based on initial discussions with the NHDES, the Plan will include PSNH's anticipated monitoring method for each applicable emission limitation as well as alternative monitoring methods that may be warranted over the permit term due to the availability of enhanced monitoring equipment. The Plan will also include a description of PSNH's commitment to comply with the applicable MATS work practice standards, recordkeeping, and reporting requirements.

Verification of Emissions

Although there is no date set for receipt of DES' Temporary Permit to install the DSI/ACI control technologies, PSNH expects that the permit will be issued by December 2014. Installation of the control technologies is expected to begin during January 2015 with the construction of the DSI/ACI systems expected to be completed by September 2015. Start up and commissioning of the systems is expected to begin September 2015 and equipment performance testing/optimization completed by December 2015. Following optimization of the systems, and prior to April 2016, PSNH will conduct stack tests and monitor the CEMS to verify that emissions of mercury, hydrochloric acid and sulfuric dioxide are demonstrating compliance with MATS and NAAQS.

Final Air Dispersion Modeling and Temporary Permit Application Submittal

PSNH will conduct final air dispersion modeling based on current modeling guidance and any new additional background and interactive source data. The draft modeling protocol (2014) will be reviewed, updated if necessary, and submitted to DES for approval. A detailed modeling report will be submitted as part of a Temporary Permit Application requesting that DES revise the current SO_2 emission limits for Schiller Units 4 and 6 and establish new limits based on the outcome of the final modeling. The application package is expected to be submitted during the First Quarter of 2016.

An updated DSI/ACI Project schedule which includes the construction and permitting milestones and anticipated completion target dates can be found in Attachment A of this submittal. Please note that all target dates beginning with installation of the DSI/ACI systems are tentative and based on when Schiller Station expects to receive the Temporary Permit from NHDES.

PSNH looks forward to working with NHDES to implement and complete the DSI/ACI Permitting Action Plan. Please contact Sheila Burke of my staff at 634-2512 if you would like additional information relative to the proposed DSI/ACI systems installation, or the previously submitted permit application.

Sincerely,

William H. Smagula

William H. Smagula, P.E.
Vice President – PSNH Generation

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ATTACHMENT A

Schiller DSI/ACI Installation and Permit Action Plan Milestone Target Dates	
Target Date	**Milestones**
February 2014	Submitted DSI Temporary Permit Application
April 2014	Awarded Owners Engineer Contract
March – July 2014	Development of DSI/ACI Specification
July 2014	Submission of Draft Exploratory Air Dispersion Modeling Protocol
August 2014	Solicitation of Bids for DSI/ACI System
September 2014[1]	Exploratory Air Dispersion Modeling Complete
September 2014	Award DSI/ACI System Contract Begin Preliminary System Engineering
September 2014	Submit Supplemental Information MATS Compliance Plan
November 2014	Development of System installation Specification
December 2014	Expected Date of Receipt of Permit to Install
December 2014	Solicitation of Bids for System Installation and Award Contract
January 2015 [2]	Begin installation of DSI/ACI
September 2015	Completion of Construction
December 2015	Start up, Commissioning , Performance Testing, System Optimization
	Verification of emissions – stack tests, CEMS
	Final Air Dispersion Modeling to establish new Unit 4 and Unit 6 SO2 emission limit
January – March 2016	Submit TP Application requesting new SO2 emission limits
April 2016	MATS Compliance Date – Schiller Station

[1] Target date is subject to change based on DES approval of Modeling Protocol
[2] Target dates assume PSNH receives Temporary Permit by the end of 2014